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PTO/SB/08A (10-96)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 1

### Complete if Known

Application Number	10/804,446
Filing Date	3/19/04
First Named Inventor	Kolosov et al.
Group Art Unit	2850
Examiner Name	Miller

Attorney Docket Number 1012-189

### U.S. PATENT DOCUMENTS

Examiner Initials'	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		3,622,968		Silverman	11/23/1971	
		3,718,032		Gray	02/27/1973	
		3,778,757		Houston	12/11/1973	
		4,342,936		Marcus et al.	08/03/1982	
		4,349,881		November et al.	09/14/1982	
		4,370,662		Hou et al.	01/1983	
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		4,526,480		Ward	07/1985	
		4,543,829		Lerch	10/1985	
		4,721,874		Emmert	01/26/1988	
		4,734,609		Jasime	03/29/1988	
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### FOREIGN PATENT DOCUMENTS

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		Office <sup>3</sup>	Number <sup>4</sup>				
A		EP 0102490		Bupp & Reutter GMBH	03/14/1984		
		EP 0282251		Schlumberger Electronics	09/14/1988		
		EP 0676638		Tektronix, Inc.	10/11/1995		
		WO 99/51980		Symyx	10/14/1999		
		WO 00/67086		Symyx	11/09/2000		
		WO 99/18431		Symyx	04/15/1999		
		GB 2187286		Hatschek	09/03/1987		
		WO 01/77624		The Charles Stark	10/18/2001		
		WO 91/02975		Ratner et al.	3/7/1991		

Examiner Signature

*Ron Miller*

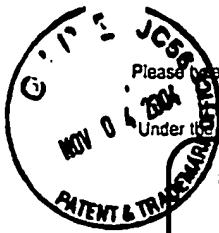
Date Considered

*3/2/04*

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Sheet 1 of 1

**Complete If Known**

Application Number	10/804,446
Filing Date	3/19/04
First Named Inventor	Kolosov
Group Art Unit	
Examiner Name	
Attorney Docket Number	1012-189

Sheet 1 of 1

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		Number	Kind Code* (if known)			
165	4,782,332			Cipris et al.	11/1/1988	
	4,970,492			King	11/13/1990	
	5,332,961			Hammerle	7/26/1994	
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	2002/0162390			Ismail et al.	11/7/2002	

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Bret Miller

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Sheet	1	of	1	Attorney Docket Number	1012.189
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### Complete if Known

Application Number	10/804,446
Filing Date	3/19/2004
First Named Inventor	Kolosov
Art Unit	
Examiner Name	

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
Ron		US- 2002/0162385	11/7/2002	Ismail et al.	
		US- 3,710,275	1/9/1973	Tanaka et al.	
		US- 4,549,427	10/29/1985	Kolesar, Jr.	
		US- 4,802,370	2/7/1989	EerNisse et al.	
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		US- 6,286,363	9/11/2001	Discenzo	
		US- 6,644,095	11/11/2003	Van Mellekom et al.	
✓		US- 6,023,961	2/15/2000	Discenzo et al.	
		US-			

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner Signature

Ron Mille

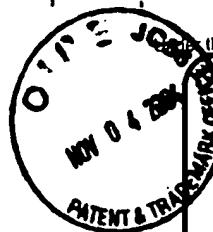
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of

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Application Number	10/804,446
Filing Date	3/19/04
First Named Inventor	Kolosov
Group Art Unit	
Examiner Name	
Attorney Docket Number	1012-189

## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office <sup>3</sup>	Number <sup>4</sup>			
1232		DE	4424422 (abstract)	Dieter et al.	1/18/1996	
1233		GB	2114745	Bestobell Ltd.	8/24/1983	
		JP	8112613 (abstract)	Sky Alum. Co. Ltd.	5/7/1996	
		JP	5129874 (abstract)	Seiko Epson Corp.	5/25/1993	
		JP	60134617 (abstract)	Kinsaki KK	7/17/1985	
1234		WO	02/23134	Lewis	3/21/2002	

**Examiner  
Signature**

Boe Miller

Date Considered

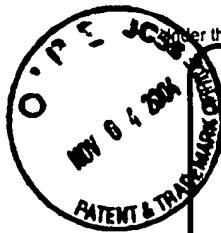
$$3) 7106$$

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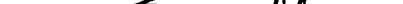


<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p><i>(use as many sheets as necessary)</i></p>				<p><b>Complete If Known</b></p>	
				<b>Application Number</b>	10/804,446
				<b>Filing Date</b>	3/19/04
				<b>First Named Inventor</b>	Kolosov
				<b>Group Art Unit</b>	
				<b>Examiner Name</b>	
<b>Sheet</b>	1	<b>of</b>	1	<b>Attorney Docket Number</b>	1012-189

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
✓	5,357,964			Spivey et al.	10/1994	
	5,375,470			Matsushima et al.	12/1994	
	5,454,045			Perkins et al.	09/1995	
	5,455,475			Josse et al.	10/1995	
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	6,182,499 B1			McFarland et al.	02/2001	
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	4,312,228			Wohltjen	01/26/1982	
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	4,760,351			Newell et al.	07/26/1988	

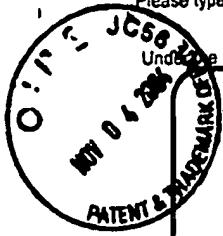
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Sheet 1 of 2

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Application Number	10/804,446
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Group Art Unit	
Examiner Name	
Attorney Docket Number	1012-189

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Attorney Docket Number 1012-189

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JK	4,767,719			Finlan	08/30/1988	
	4,922,745			Rudkin et al.	05/08/1990	
	5,283,037			Baer et al.	02/01/1994	
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	5,306,644			Myerholtz et al.	04/26/1994	
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DK	5,698,089			Lewis et al.	12/16/1997	
	5,705,399			Larue	01/06/1998	
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	5,959,297			Weinberg et al.	09/28/1999	
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## FOREIGN PATENT DOCUMENTS

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Signature**

Bob Truille

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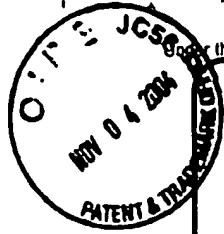
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Signature**

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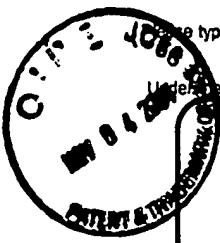
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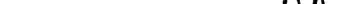
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Sheet	1	of	1
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		1012-189	

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Examiner Initials*	Cite No.*	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			
152	4,103,224			Taro et al.	7/25/1978	
1	5,885,849			Di Stephano et al.	3/23/1999	
	5,792,938			Gokfeld	8/11/1998	
	6,126,311			Schuh	10/3/2000	
	6,041,642			Duncan	3/28/2000	
	4,535,620			Cunnungham	8/20/1995	
	6,327,890			Galipeau et al.	12/11/2001	
	6,494,079			Matsiev et al.	12/17/2002	
	5,338,416			Mlcak et al.	8/16/1994	
	5,464,509			Mlcak et al.	11/7/1995	
	6,275,137			Doppalapudi et al.	8/14/2001	
	6,311,549			Thundat et al.	11/6/2001	
	6,441,716			Doppalapudi et al.	8/27/2002	
	6,511,915			Mlcak	1/28/2003	
	2002/0068488			Tuller et al.	6/6/2002	
	2002/0070841			Doppalapudi et al.	6/13/2002	
	2002/0137348			Mlcak	9/26/2002	
	4,862,384			Bujard	8/29/1989	
	6,661,162			Nagai et al.	12/9/2003	
✓	5,325,704			Mariami et al.	7/5/1994	

## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	3/2/06
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Sheet 1 of 1

**Complete if Known**

Application Number	10/804,446
Filing Date	3/19/04
First Named Inventor	Kolosov
Group Art Unit	
Examiner Name	
Attorney Docket Number	1012-189

**U.S. PATENT DOCUMENTS**

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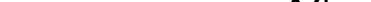
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Substitute for form 1449A/PTO		Complete If Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>		Application Number	10/804,446
		Filing Date	3/19/04
		First Named Inventor	Kolosov
		Group Art Unit	
		Examiner Name	
Sheet	1	of	1
		Attorney Docket Number	1012-189

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	5,918,354			Ikegami et al.	7/6/1999	
	2002/0178805			DiFoggio et al.	12/5/2002	
	5,361,632			Magnani	11/8/1994	
	3,903,732			Rork et al.	9/9/1975	
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	6,176,323			Weirich et al.	1/23/2001	
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	5,622,223			Vasquez	4/22/1997	
	2003/0179002			Beylich et al.	9/25/2003	

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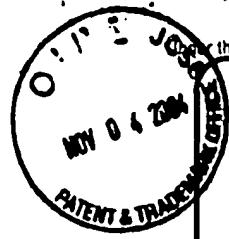
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Sheet 1 of 1

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Application Number	10/804,446
Filing Date	3/19/04
First Named Inventor	Kolosov
Group Art Unit	
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**U.S. PATENT DOCUMENTS**

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		Number	Kind Code² (if known)			
✓		5,235,844		Bonne et al.	8/17/1993	
		5,421,190		Brandle et al.	6/6/1995	
✓		4,890,480		Young	1/2/1990	
		2002/0064649		Lembke et al.	5/30/2002	
		6,536,634		Berndorfer et al.	3/25/2003	
✓		2003/0062910		Wang et al.	4/3/2003	
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✓		6,640,644		Mireles et al.	11/4/2003	
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✓		2002/0092340		Prater et al.	7/18/2002	

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Application Number 10/804,446

**Filing Date** 3/19/04

**First Named Inventor** Kolosov

### Group Art Unit

**Examiner Name**

Attorney Docket Number 1012-189

10 of 10 pages

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Application Number	10/804,446
Filing Date	3/19/04
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1265		EP 0 769 695 A	4-23-1997	NGK Insulators LTD	
		DE 100 14 724	9-27-2001	Endress+Hauser GMBH Co.	
		JP 59126931	7-21-1984		

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Application Number	10/804,446
Filing Date	3/19/04
First Named Inventor	Kolosov
Group Art Unit	
Examiner Name	
Attorney Docket Number	1012-189

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

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<i>RKm</i>		FISCH, M.R., et al., "Improved Acoustic Viscosimeter Technique", J. Acoust. Soc. Am., September 1976, pp. 623-625, v. 60, No. 3.	
<i>I</i>		<del>HLAVAY, J. and G.G. Guilbault, "Applications of the Piezoelectric Crystal Detector in Analytical Chemistry", Analytical Chemistry, November 1977, pp. 1890-1898, v. 49, No. 13.</del>	
<i>RKm</i>		KANAZAWA, K. KEIJI and Joseph G. Gordon II, "The Oscillation Frequency of a Quartz Resonator in Contact with a Liquid", Analytica Chimica Acta, 1985, pp. 99-105, Elsevier Science Publishers B.V., Amsterdam.	
<i>RKm</i>		KIPLING, ARLIN L and Michael Thompson, "Network Analysis Method Applied to Liquid-Phase Acoustic Wave Sensors", Anal. Chem., 1990, pp. 1514-1519, 62.	
<i>RKm</i>		MICHELS, A. et al., "1 MHz Quartz Length Extension Resonator as a Probe for Scanning Near-Field Acoustic Microscopy", Thin Solid Films, 1995, pp. 172-175, 264.	
<i>RKm</i>		MURAMATSU, HIROSHI et al., "Computation of Equivalent Circuit Parameters of Quartz Crystals in Contact with Liquids and Study of Liquid Properties", Anal. Chem., 1988, pp. 2142-2146, 60.	
<i>RKm</i>		MURAMATSU, H. et al., "A Quartz Crystal Viscosity Sensor for Monitoring Coagulation Reaction and Its Application to a Multichannel Coagulation Detector", Biosensors & Bioelectronics, 1991, pp. 353-358, 6, Elsevier Science Publishers Ltd. England.	
<i>J</i>		<del>NOMURA, T. and M. Iijima, "Electrolytic Determination of Nanomolar Concentrations of Silver in Solution with a Piezoelectric Quartz Crystal", Analytica Chimica Acta, 1981, pp. 97-102, 131, Elsevier Scientific Publishing Company.</del>	
<i>K</i>		<del>PCT International Search Report, dated 27 April 1998, PCT/US97/18192.</del>	
<i>RKm</i>		NEWSAM, J. et al., "High Throughput Experimentation for the Synthesis of New Crystalline Microporous Solids," Microporous and Mesoporous Materials 48 (2001) 355-365.	
<i>RKm</i>		AKPORIAYE, D. et al., "Combinatorial Chemistry - The Emperor's New Clothes?," Microporous and Mesoporous Materials 48 (2001) 367-373.	

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Sheet 1 of 0			First Named Inventor	Kolosov	
			Group Art Unit		
			Examiner Name		
			Attorney Docket Number	1012-189	

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L		<del>Patent Abstracts of Japan, Publication No. 05-129874, Application No. 03-291660, filing date 11/7/1991, Applicant: Seiko Epson Corp</del>			
M		<del>Abstract of Patent No. JP60134617, published 7/17/1985, Applicant: Kinsiki KK.</del>			
N		<del>WULLNER et al., Multi Function Microsensor for Oil Condition Monitoring Systems, pages 1-5</del>			
P	<i>Bm</i>	<del>HAUPTMANN et al., Ultrasonic Sensors for Process Monitoring and Chemical Analysis; State-of-the-Art and Trends, 1998, pages 32-48.</del>			
	<i>Bm</i>	<del>JAKOBY et al., Viscosity Sensing Using a Love-wave Device, 1998, pages 275-281.</del>			
	<i>Bm</i>	<del>POLLA et al., Processing and Characterization of Piezoelectric Materials and Integration into Microelectromechanical Systems, 1998, pages 563-597.</del>			
	<i>Bm</i>	<del>PUJARI et al., Reliable Ceramics for Advanced Heat Engines, American Ceramic Society Bulletin, Volume 74, No. 4, April 1995, pages 86-90.</del>			
P		<del>ODEN et al., Viscous Drag Measurements Utilizing Microfabricated Cantilevers, American Institute of Physics, 1996, pages 3814-3816.</del>			
O		<del>MERHAUT, Theory of Electroacoustics, pages 100 and 101.</del>			
	<i>Bm</i>	<del>MANALIS et al., Two-dimensional Micromechanical Bimorph Arrays for Detection of Thermal Radiation, Appl. Phys. Lett., Vol. 70, No. 24, June 16, 1997, pages 3311-3313.</del>			
	<i>Bm</i>	<del>LIN et al., Operation of an Ultrasensitive 30-MHz Quartz Crystal Microbalance in Liquids, Analytical Chemistry, Vo. 65, No. 11, June 1, 1993, pages 1546-1551.</del>			

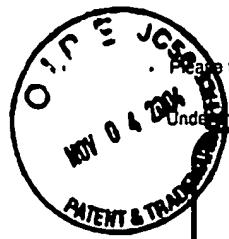
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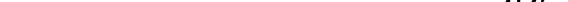
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		Filing Date	3/19/04
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		Attorney Docket Number	1012-189
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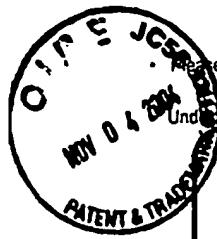
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<i>BM</i>		LI et al., Electromechanical Behavior of PZT-Brass Unimorphs, Journal of the American Ceramic Society, Vol. 82, No. 7, 1999, pages 1733-1740.	
		<del>LANDAU et al., Fluid Mechanics, pages 96 and 97.</del>	
<i>BM</i>		CLELAND et al., Fabrication of High Frequency Nonometer Scale Mechanical Resonators from Bulk Si Crystals, Appl. Phys. Lett., Vol. 69, No. 18, October 28 1996, pages 2653-2655.	
		<u>International Search Report mailed July 9, 2004, PCT/US2004/008531 (1012.188W01)</u>	
		<del>FERRY, Viscoelastic Properties of Polymers, Chapters 5-8, pages 96-176.</del>	

Examiner Signature		Date Considered	3/2/06
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

1

of 0

Application Number 10/804,446

Filing Date 3/19/04

First Named Inventor Kolosov

Group Art Unit

Examiner Name

Attorney Docket Number 1012-189

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
BK		U.S. Application Serial No. 09/420,334 entitled " Graphic Design of Combinatorial Material Libraries" (Lacy, et al.) filed on October 18, 1999	
T		U.S. Patent Application Serial No. 09/305,830 titled "Synthesizing Combinatorial Libraries of Materials" (Rust, et al.) filed on May 5, 1999	
U		U.S. Application Serial No. 09/755,623 entitled "Laboratory Database System and Methods For Combinatorial Materials Research" (Dorsett, Jr., et al.) filed on January 5, 2001.	
V		The family of applications for U.S. Patent Application Serial No. 09/174,856 titled "Graphic Design of Combinatorial Material Libraries" (Lacy, et al.) filed on October 19, 1998.	
W		U.S. Application Serial No. 09/550,549 entitled "Automated Process Control And Data Management System And Methods" (Crevier, et al.) filed on April 14, 2000.	
X		U.S. Patent Application Serial No. 09/800,819 entitled "Method and Apparatus for Characterizing Materials by Using a Mechanical Resonator" filed on March 7, 2001.	
Y		U.S. Patent Application Serial No. 09/580,024 entitled "Instrument for High Throughput Measurement of Material Physical Properties and Method of Using the Same" filed on May 26, 2000.	
Z		U.S. Patent Application Serial No. 10/155,207 entitled "High Throughput Microbalance and Methods of Using Same" filed on May 24, 2002.	
		U.S. Patent Application Serial No. 09/285,963 entitled "Rapid Characterization of Polymers" (Safir et al.) filed on April 2, 1999.	
		PCT International Search Report, dated 21 October 2002, PCT/US02/17780 (1012-167WO)	

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Signature

Rosemary Mills

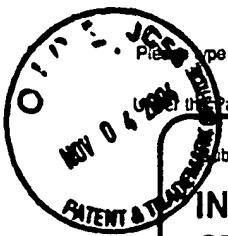
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## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheet 1 of 0

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**Application Number** 10/804,446

**Filing Date** 3/19/04

**First Named Inventor** Kolosov

## Group Art Uni

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Attorney Docket Number 1012-189

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(use as many sheets as necessary)		Filing Date	3/19/04
		First Named Inventor	Kolosov
		Group Art Unit	
		Examiner Name	
		Attorney Docket Number	1012-189
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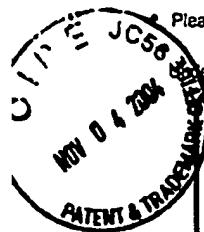
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		NESBITT W. HAGOOD IV et al., "Development of Micro-Hydraulic Transducer Technology", 10th International Conference on Adaptive Structures and Technologies, Oct. 11-13, 1999, Paris, France.	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/804,446
(use as many sheets as necessary)		Filing Date	3/19/04
Sheet 1 of 0		First Named Inventor	Kolosov
		Group Art Unit	
		Examiner Name	
		Attorney Docket Number	1012-189

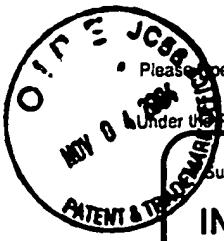
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A4		Pamphlet, "Hygroscopicity Measurement Apparatus," PUUMAN (no date).		
A5		Laine, E., and M. Aarnio, "Device for the Investigation of Humidity-related Behaviours of Materials," Department of Physics, University of Turku (no date).		
A6		Surface Acoustic Wave Hygrometer, <a href="http://technology.jpl.nasa.gov">http://technology.jpl.nasa.gov</a> , accessed 3/16/2002, 2 pages.		
BK		Hoenk, Michael, et al., "Surface Acoustic Wave Hygrometer: Measuring Water Vapor in Earth's Atmosphere," <a href="http://mishkin.jpl.nasa.gov">http://mishkin.jpl.nasa.gov</a> , accessed 3/16/2002, 7 pages.		
BK		Trolier, Susan et al., "Preparation of Chemically Etched Piezoelectric Resonators for Density Meters and Viscometers", Mat. Res. Bull., Vol. 22, pp. 1287-1274 (1987)		
A7		J.M. Hammond, R.M. Lee, D.G. Libby, X.J. Zhang and I.A. Prager, "An Acoustic Automotive Engine Oil Quality Sensor", Transducers 97, S. 1343-1346.		
BK		H. Valimaki, J. Lekkala, H. Helle, "Evaluation of Equivalent Circuit Model for Thickness-Shear Mode Resonators in Liquids", Eurosensors X, Leuven, Belgium 11.9.1996, S1377-1380.		
BK		H. Endo, K. Soda, I. Karube, H. Muramatsu, "Online Monitoring of the Viscosity in Dextran Fermentation Using Piezoelectric Quartz Crystal", Biotechnology and Bioengineering, Vol. 36, S 636-641 (1990)		
BK		Mason W. P., Hill M., "Measurement of the Viscosity and Shear Elasticity of Liquids by Means of a Torsionally Vibrating Crystal", Transactions of A.S.M.E., 69 (1947) 359-370		
BK		Barnes C., "An in vitro urea sensor using a torsion-wave crystal device", Sensors and Actuators B, 8 (1992) 143-149.		
BK		Schmitt N. et al., "A new method based on acoustic impedance measurements for quartz immunosensors", Sensors and Actuators B43 (1997) 217-233		

Examiner Signature	<i>Bob Miller</i>	Date Considered	3/2/04
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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 0

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Application Number	10/804,446
Filing Date	3/19/04
First Named Inventor	Kolosov
Group Art Unit	
Examiner Name	
Attorney Docket Number	1012-189

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
A8		<u>Senstronics "Storm 50 Joint Pressure and Temperature Specifications".</u>	
A9		<u>"Cantilever Sensor Research Tool for Science and Industry", diScntris, Veeco.</u>	
B25		<u>BENES et al., "Viscosity Sensor Based on a Symmetric Dual Quartz Thickness Shear Resonator", pages 1-7. 2003.</u>	
B25		<u>NSF Award Abstract #0239151, February 6, 2003, pages 1-2.</u>	
B25		<u>NUSSBAUM, "An Accurate Non-Radioactive Fluid Density Sensor", presentation to the Society of Petroleum Engineers, Bergen, Norway, April 1, 2003.</u>	
A10		<u>FLEMING, The Vibrating Tuning Fork Fluid Density Tool", pp. III-III5.</u>	
A11		<u>"The Lubri-Sensor Electronic Oil Quality Analyser", www.pmlubricants.com, accessed on February 5, 2004.</u>	
A12		<u>"Sensor Technology Improves Jet Engine Reliability", www.afrlhorizons.com, accessed on February 5, 2004.</u>	
A13		<u>"Oil Quality Sensor", www.sae.org, accessed on February 5, 2004.</u>	
A14		<u>"Refrigerant Flow in Evaporators", www.heatercraftecom.com, accessed on February 5, 2004.</u>	

Examiner  
Signature

*Ron Mills*

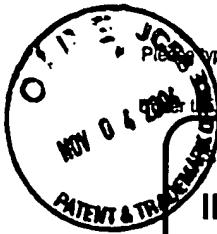
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Application Number	10/804,446
Filing Date	3/19/04
First Named Inventor	Kolosov
Group Art Unit	
Examiner Name	
Attorney Docket Number	1012-189

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials'	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
A15		"Theory of the Vibrating Tuning Fork Fluid Density Tool", <a href="http://www.lanes.ac.uk">www.lanes.ac.uk</a> , page 1, accessed on May 7, 2003.	
A16		"A Vibrating Tuning Fork Fluid Density Tool", <a href="http://www.smithinst.ac.uk">www.smithinst.ac.uk</a> , page 1, accessed on February 2, 2004.	
A17		"SINMS Oil and Gas Workshop", Draft: Notes of presentations and discussions, ICMS, Edinburgh, March 11, 2002.	
A18		"Field Trials of The Viscosity & Fluid Density Tool (VFD)", Nan Gall Technology, published August 2002.	
A19		"ViscoMaster HFO Viscosity Transmitter for Marine and Power Applications", Solartron Mobrey.	
A20		"CJV-5000 Vibro Viscometer Utilizing Tuning Fork Technology", Yahoo Search accessed on June 18, 2003.	
A21		"SOS Smart Oil Sensor", Impact Technologies, LLC.	
A22		Demphlet by Kavlico A Selectron Company, Capability Brochure Industrial Sensors and Transducers.	

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*Ron Miller*

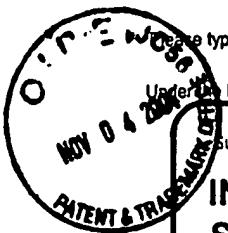
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Sheet 1 of 0

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**Application Number** 10/804,446

**Filing Date** 3/19/04

**First Named Inventor** **Kolosov**

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**Examiner Name**

Attorney Docket Number 1012-189

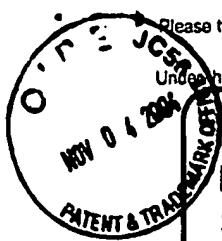
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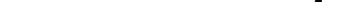
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				Application Number	10/804,446
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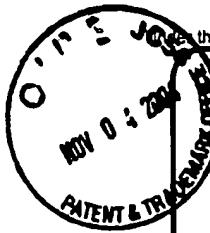
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Application Number	10/804,446
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Sheet 1 of 0			First Named Inventor	Kolosov
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Ad6		J.W. Grate, et al, "Smart Sensor System for Trace Organophosphorus and Organosulfur Vapor Detection Employing a Temperature-Controlled Array of Surface Acoustic Wave Sensors, Automated Sample Preconcentration, and Pattern
Ad7		"Viscosity and Density Sensing with Ultrasonic Plate Waves, B.A. Martin, S.W. Wenzel, and R.M. White, Sensors and Actuators, A21-A23 (1990), 704-708
		"On-line Sensor for Density and Viscosity Measurement of a Liquid or Slurry for Process Control in the Food Industry" Margaret S. Greenwood, Ph.D. James R. Skorpik, Judith Ann Bamberger, P.E. Sixth Conference on Food Engineering, 1999 AIChE Annual Meeting, Dallas, Texas
		"Micromachined viscosity sensor for real-time polymerization monitoring", O.Brand, J.M. English, S.A. Bidstrup, M.G. Allen, Transducers '97, 121-124 (1997)
		"Frequency response of cantilever beams immersed in viscous fluids with applications to the atomic force microscope", J.E. Sader, J. Appl. Phys. 84, 64-76 (1998)
		"Resonance response of scanning force microscopy cantilever", G.Y. Chen, R.J. Warmack, T.Thundat, and D.P. Allison, Rev. Sci. Instrum. 65, 2532-2537(1994)
		"Lecture notes on shear and friction force detection with quartz tuning forks" Work presented at the "Ecole Thématique du CNRS" on near-field optics, March 2000, La Londe les Maures, France by Khaled Karrai, Center for
		J. Sorab, G.S. Saloka: "Engine Oil Viscosity Sensors Using Disks of PZT Ceramic as Electromechanical Vibrators" Society of Automotive Engineers SAE, no. 971702, 1997
Ad8		E. Bohmer, "Elemente der angewandten Elektronik", August 1978, with English translation

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3/2/06

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First Named Inventor	Kolosov
Group Art Unit	
Examiner Name	
Attorney Docket Number	1012-189

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### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
<i>BK</i>		Zhang et al.: "Determination of Liquid density with a low frequency mechanical sensor based on quartz tuning fork" Sensors and Actuators B, Elsevier Sequoia S.A. Lausanne, CH. vol. 84, no. 2-3, May 15, 2002, pages 123-128.	
<i>BK</i>		Shih et al.: "Simultaneous Liquid Viscosity and Density Determination with Piezoelectric Unimorph Cantilevers: Journal of Applied Physics, American Institute of Physics. New York, U.S., vol. 89, no. 2, January 15, 2001, pages 1497-1505.	
<i>BK</i>		Dring et al.: "Integrated on-line multisensing of fluid flow using a mechanical resonator" Sensors and Actuators A, Elsevier Sequoia S.A., Lausanne, CH, vol. 85, no. 1-3, August 25, 2000, pages 275-279.	
A29		<u>International Search Report dated March 22, 2004 (PCT/US03/32982) 1012.183WO</u>	
A30		<u>International Search Report dated December 12, 2003 (PCT/US03/12503) 1012.171WO</u>	
<i>BK</i>		Greenwood et al., "Measurement of Viscosity and Shear Wave Velocity of a Liquid or Slurry for On-line Process Control", Ultrasonics 39 (2002) pp. 623-630.	
A31		<u>"Sensors", www.izm.fhg.de, accessed on October 3, 2002.</u>	
A32		<u>"Sensors and Actuators, INTELLEK Oil Condition Sensor", DELPHI Energy and Chassis Systems.</u>	
A33		<u>MURAMATSU et al., "Viscosity Monitoring with a Piezoelectric Quartz Crystal and Its Application to Determination of Endotoxin by Gelation of Limulus Amebocyte Lysate", March 8, 1988.</u>	
<i>BK</i>		LANGDON, "Vibratory Process Control Transducers", The Marconi Review, Third Quarter, 1980, pp 156-175.	
A34		<u>Invitation to Pay Additional Fees, PCT/US03/32983, mailed April 8, 2004. (1012.192WO)</u>	

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